

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

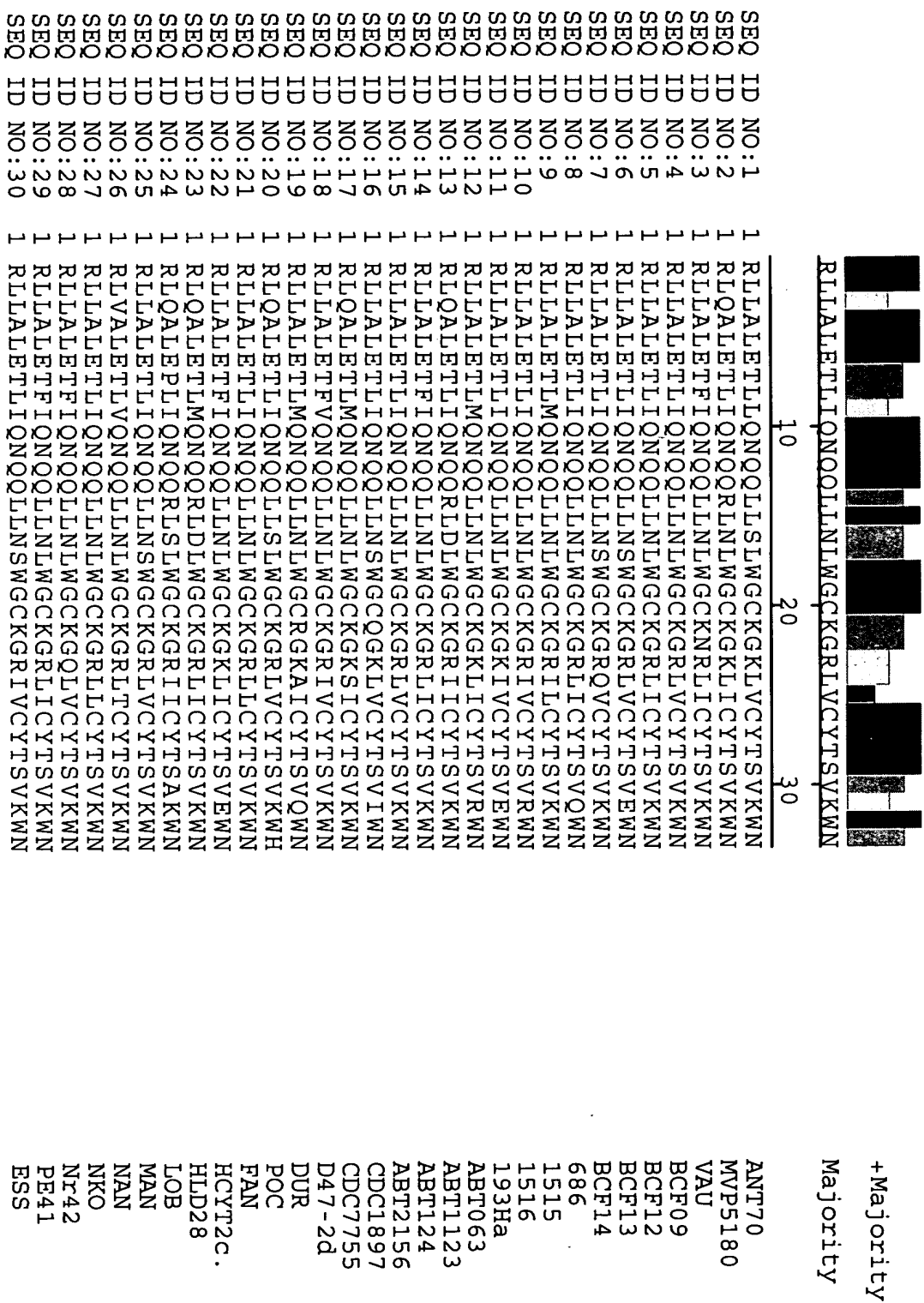
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**





SEQ ID NO: 70



Figure 3. Ectodomain of gp41 (MN isolate)

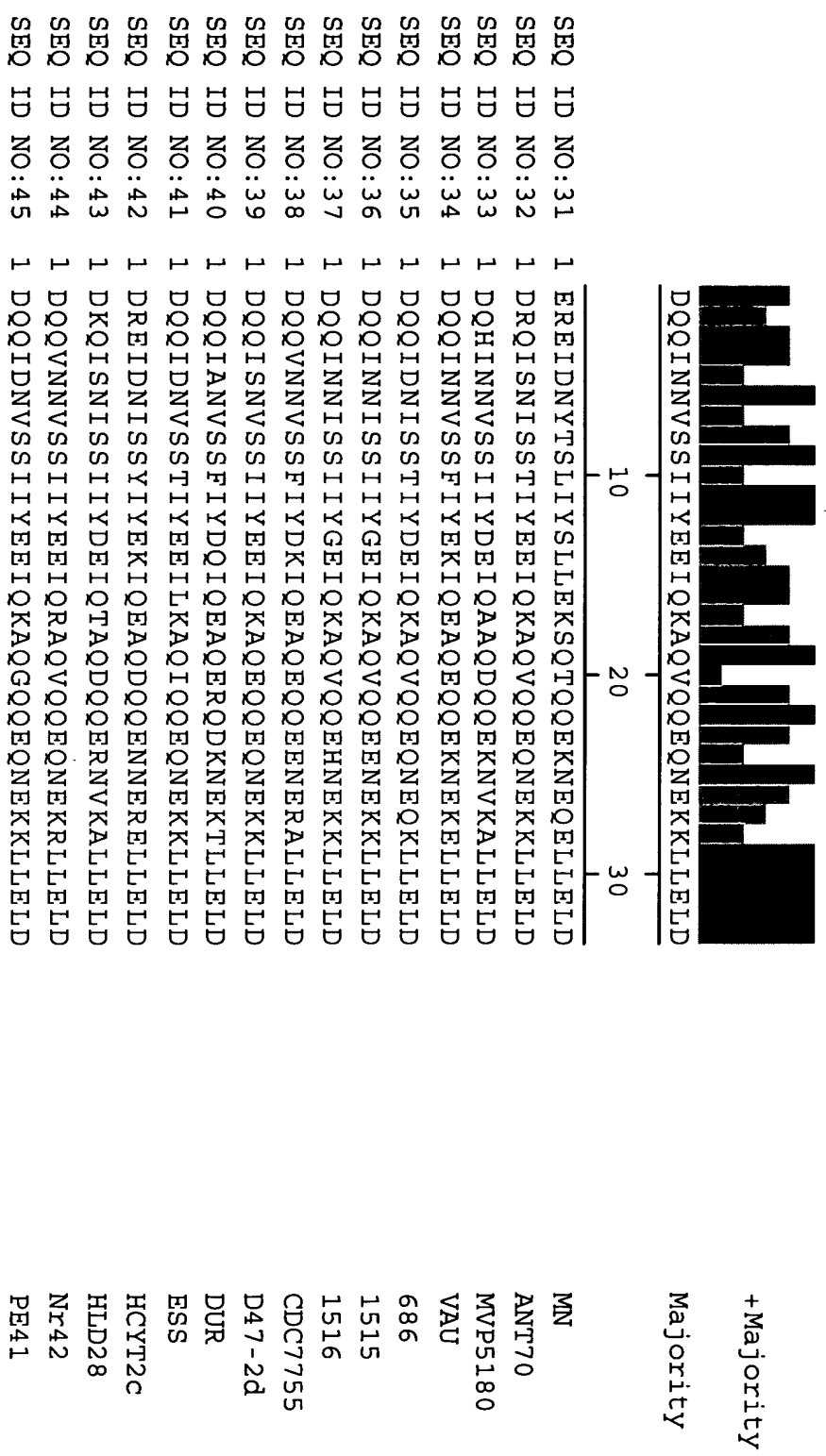


Figure 4. Alignment of MN (type B) and group O gp41 sequences in the region of the descending helix

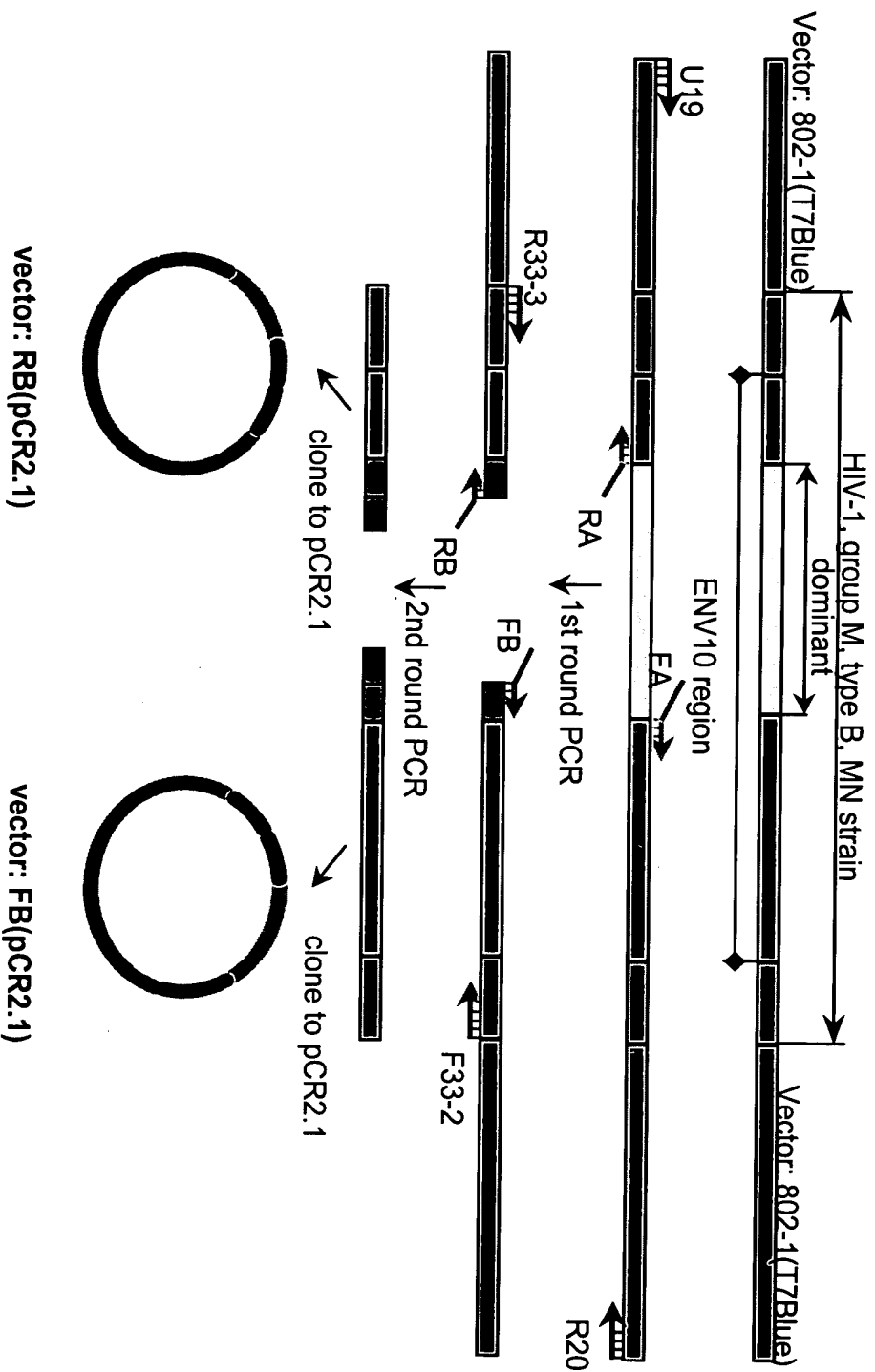


Figure 5a.

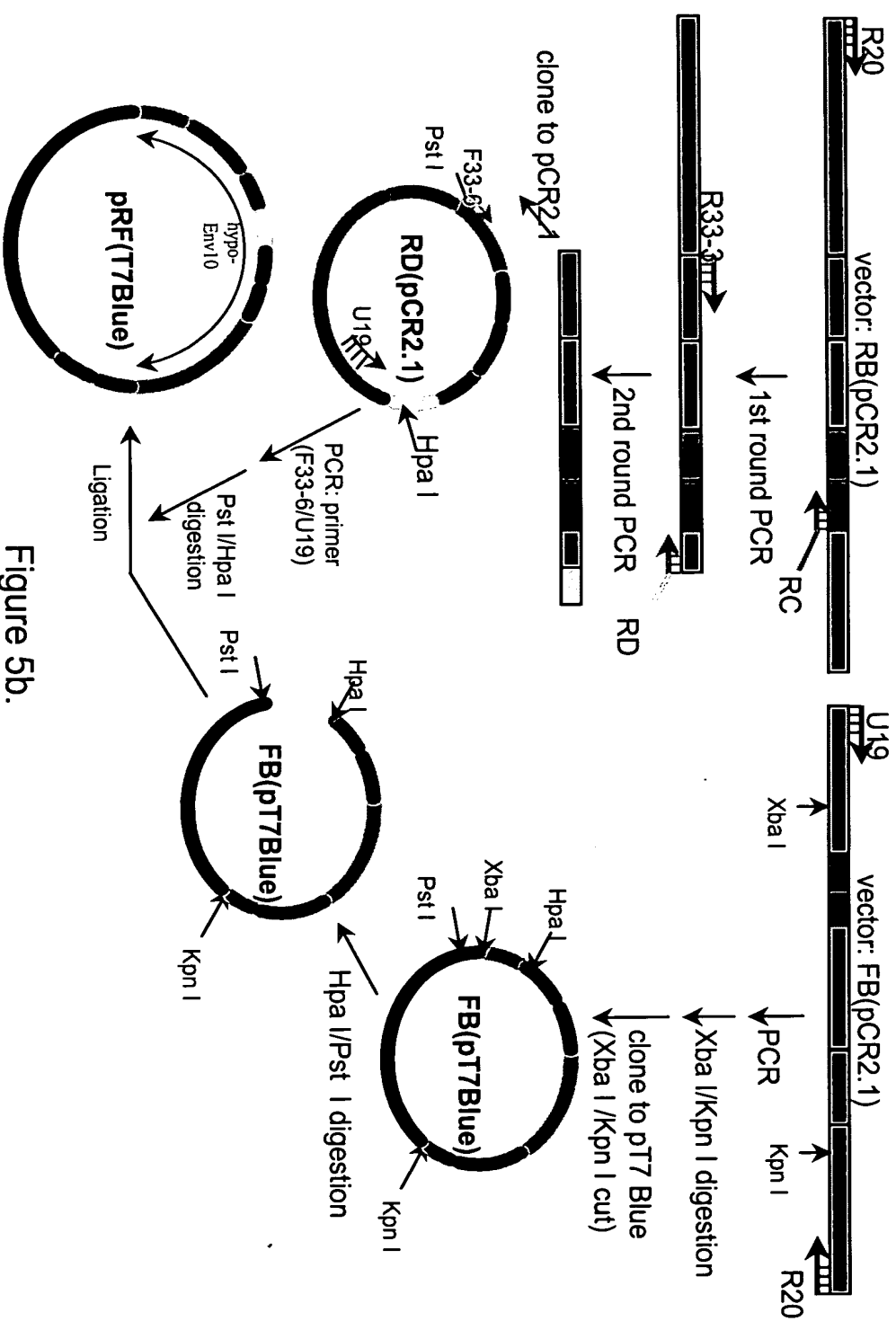


Figure 5b.

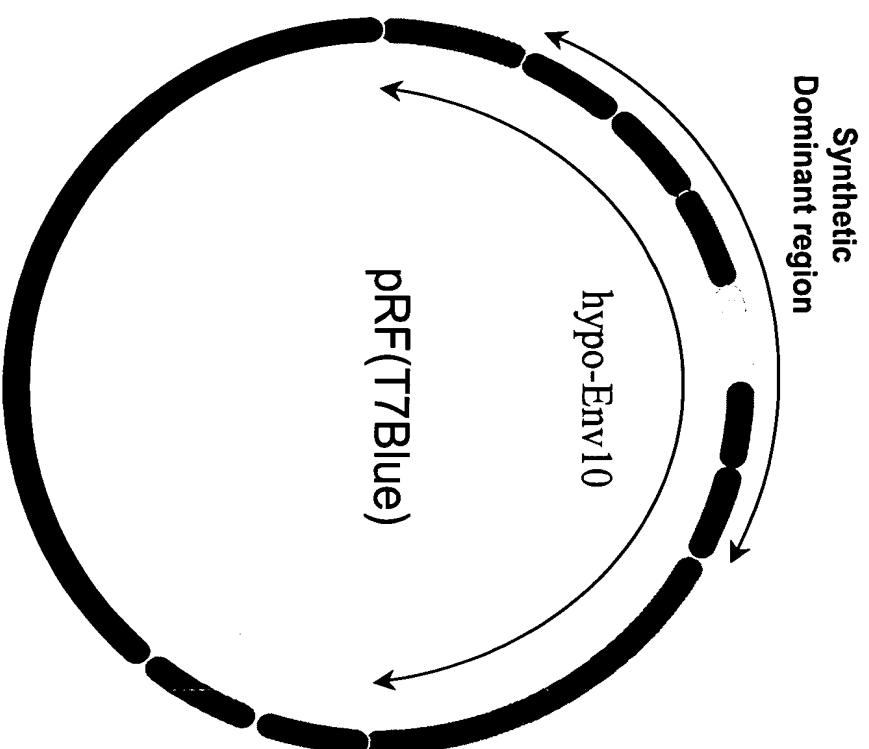


Figure 5c.



# **Primers used in the experiment:**

SEQ ID NO:46	FA:	5'-ATTGGAGGCCCGAGATCAACAAGAGGAACGTTCTGAGTTGCTGGAGCTAGATAAATGG
SEQ ID NO:47	FB:	5'-ACGAAGTTAACAAATGTTCTCTATTATTATGATAAGATTTTGGAAGCCAGGATCA
SEQ ID NO:48	RA:	5'-CAAGAATTCAGACGCTGTTGGTTTGCAATCAGAGTCTCCAGAGCCTGTAGGCGAGCTCGAGCTG
SEQ ID NO:49	RB:	5'-GGGCACTAGTATAACAATAATACGACCCTTACAACCCCAAGAATTCAGACGCTGT
SEQ ID NO:50	RC:	5'-CCAGATATCCTCCAGAGACTTATTAGACCAAGAAGCATGCCAACGGGCACTAGTATAACAAA
SEQ ID NO:51	RD:	5'-ACATTGTTAACTTGCTGCTGCCATTGCATCCAGTCAATGTTATCCAGATATCCTCCAGAGA
SEQ ID NO:52	U19:	5'-GTTTCCCACTCAGACGCT
SEQ ID NO:53	R20:	5'-CAGCTATGACCATGATTACG
SEQ ID NO:54	R33-3:	5'-ACCGGAATTCGATTTCCCTGGGTT
SEQ ID NO:55	F33-2:	5'-CATAAAGCTTGTCCCAAGAGTTCC
SEQ ID NO:56	F33-6:	5'-GCCACTGCAGCCAGACTATATTGTC

Figure 5d. Nucleotide sequences of the primers used in Figures a - c.

SEQ ID NO:57

DHFR

MRSGIMVRPLNSIVAVSQNMGIGKNGDLWPPLRNEFKYFQMTTSSVEGKQNLVIMGRKTWFSIPEKNRPLKDRINI  
VLSRELKEPPRGAHFLAKSLDDALRLIEQPELASKVDMWIVGSSVYQEA MNQPGHLRLFVTRIMQEFESDTFFPEIDL  
GKYKLLPEYPGVLSEVQEEKIKYKFEVYEKKGSR SARLLLSGI VQOQNNLLRAIEAQQHMLQLTAWGIKQLRARLQALE  
TLMQNOQRLNSWGCKGRIICYTSARWHASWSNKSLEDIMDNMTWMQWDQVNNVSSIIYDKILLEAQDQDQEEENVRELELD  
group O  
KMASLWNWFDTTNWLWYIKIFIMIVGGLVGLRIVEAVLSIVNRVRQGYSPLSLQTRPPVPRGPDREGEIEEGGERDRT  
SGRLVHGFLAI IWDLGPEQKLTISEEDLNSAVDHHHHHH  
myc (His)<sub>6</sub>

Figure 6a. Amino acid sequence of DHFR-hENV-MH

bioRxiv preprint doi: <https://doi.org/10.1101/2020.03.10.333333>; this version posted March 10, 2020. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.

MRSGIMVRLPINSI VAVS QNMGIGKNGDLPMPPLRMBPKYHORMTITSSVEGKQNLVTMGKWTWESIPEKNI RPLKQRIINT  
 VL SRLKBP PRGAHPLAKSLD DALRPLTEOPELASKVDMMWTVGGSSVQOEA MNOPGHPLFWVRIMOEFPESDTPPPEIDL  
 GKXKLLPBYPGVLSVEOEBEKGIKKKKEVYMEKKGSRSARPLLSGIVQOQNNLLRAIEAQOQHLQTAWGIKQLRARLOALE  
 TLMQOQRLNSWGCKGRIICYTSARWHA SWSNKSLEDIWDNMTWMQWDQOVNVSSIYDKILEAQDQOQEEENVRELELD  
 group O group O  
 KWASLWNWFEDITNWLWYIKIFIMIVGP EOKLISEEDLNSAVDHHHHHH  
 myc (His)<sub>6</sub>

*myc* (His)<sub>6</sub>

[illegible]